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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/501,250

12/06/2004

Robert Patrick Hof

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EXAMINER

SOLOLA, TAOFIQ A

ART UNIT

PAPER NUMBER

1625

MAIL DATE

DELIVERY MODE

06/01/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/501,250	Applicant(s) HOF, ROBERT PATRICK	
	Examiner Taofiq A. Solola	Art Unit 1625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/1/09</u> . | 6) <input type="checkbox"/> Other: _____ |

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Claims 1-8 are pending.

Request for Continued Examination

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.117(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/1/09 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kizaki et al., EP 1 024 139 A1 in view of Naik et al., Am. Inst. Chem. Eng. J. (1984), Vol 44(3), pages 612-646.

Applicant claims a process of making compounds of formula I comprising reacting compounds of formulae 2 and 4 in the presence of compound of formula 3, a phosphonium phase transfer catalyst.

Determination of the scope and content of the prior art (MPEP 2141.01)

Kizaki et al., teach a similar process using ammonium phase transfer catalyst.

Ascertainment of the difference between the prior art and the claims (MPEP 2141.02)

The difference between the instant invention and that of the Kizaki is that Applicant use phosphonium catalyst instead ammonium by Kizaki et al.

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Finding of prima facie obviousness---rational and motivation (MPEP 2142.2413)

However, Naik et al., teach that both catalysts are well known in the art and are commonly use as phase transfer catalyst. Therefore, the instant invention is prima facie obvious from the teachings of Kizaki et al., and Naik et al. One of ordinary skill in the art would have known to substitute phosphonium catalyst for ammonium catalyst at the time the invention was made. The motivation is from the teaching of Naik et al.

Response to Argument

Applicant's arguments filed 5/19/08 have been fully considered but they are not persuasive. Applicant contends that Naik et al., fails to teach that ammonium and phosphonium may be used interchangeably. The recent decision in *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct 1727,-----, 82 USPQ2d 1385, 1394, 1396 (2007), foreclosed this argument. Design need and/or market pressure is not absolutely required for obvious to try. The totality of Naik et al., is providing an obvious reason to try phosphonium in phase transfer reactions. Particularly because it is disclosed as more stable and widely used in phase transfer reactions (Table 1). Applicant also argues that several classes of catalysts are listed. This is not persuasive because only 5 catalysts are listed in Table 1.

Applicant further argues that' "obvious to try" test in *KSR* has not been satisfied in the' instant case. This is not persuasive because Naik et al., in Table 1, provide adequate reasons (except cost) as to why one of ordinary skill may be motivated to substitute ammonium with phosphonium as phase transfer catalyst (PTC). The recognition of the catalysts by Naik et al., as phase transfer catalysts creates an obvious to try situation, and applicant's invention confirms they are in fact

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interchangeable. A person of ordinary skill would have good reasons to interchange the catalysts, since there are 5 options cited in Table 1.

Applicant asserts that phosphonium fails to work as well as ammonium in the phase transfer (PT) reactions by Starks et al., "Phase Transfer Catalyst", Academic Press (1978), and Bram et al., Israel J. Chem. (1985), 26, pp 291-298. This is not persuasive. Just because phosphonium didn't work as well as ammonium in a particular reaction is not conclusive evidence it would not work in other reactions. In addition, failure to work as well as ammonium in the cited studies may be due other factors, such as, design and/or human errors and therefore there are no reasons not to try it in other reactions.

Applicant refers to US 5,594,153 and Halpern's article: Phase Transfer Catalysis Communications (1997) 3:1-12, and contends there is no teaching or suggestion that any catalyst other than ammonium containing catalyst is useful for esterification reaction. This is not persuasive for the reason set forth in *KSR*, Id. Also, there is no explicit teaching in the references that phosphonium is not applicable in those reactions. Using a catalyst in a reaction is not conclusive evidence that other catalysts would not work in that particular or similar reactions.

Applicant argues that the prior arts fail to teach the specific substituents in claims 2-3 and the variables (molar concentrations and temperature ranges) in claims 4-8. This is not persuasive because the argument relates to anticipatory rejection. Had the specific substituents in claims 2-3 and the variables being thought in the prior arts the rejection would not have been based on obviousness. As per MPEP 2144.06, the issue is not whether two equivalents are recognized as interchangeable or variables are thought, if equivalency is recognized in the prior art, it is obvious to substitute one for the other. The recognition of the catalysts as equivalents by Naik et al., creates an obvious to try situation for applicant.

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This is RCE of the same Application: No. 10/501,250. All claims are drawn to the same invention claimed in the earlier application and have been finally rejected on the grounds and art of record. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Telephone Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Taofiq A. Solola, PhD. JD., whose telephone number is (571) 272-0709.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres, can be reached on (571) 272-0867. The fax phone number for this Group is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1600.

/Taofiq A. Solola/

Primary Examiner, Art Unit 1625

May 28, 2009

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